2012 Pre-Delivery Inspection Service Manual

ACG T SPORT NEV

Neighborhood Electric Vehicle (NEV)

This Manual is effective as of June 1, 2011

ACG T SPORT NEV

Manufactured by:

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ACG logo:

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Notice

The **American Custom Golf Cars, Inc**., herein known as **ACG.**

"*Limited Warranty*" for owners of the **ACG T SPORT NEV** is included with each vehicle.

"*Owner's Manual*" for owners of the **ACG T SPORT NEV** is included with each vehicle.

"*Charging Procedures*" for owners of the **ACG T SPORT NEV** is included with each vehicle.

No other warranties, expressed or implied, are contained herein.

ACG has checked this vehicle before it was shipped to you r dealership; however State Laws require that each vehicle is subjected to Pre-Delivery Inspection (PID) prior it is released to the Retail Customer.

This vehicle does conform to Federal Motor Vehicle Safety Standard FMVSS #500 for LSV (low-speed vehicles), and is equipped for operation on public streets and roads.

While the vehicle conforms to FMVSS #500 for low-speed vehicles you must still check your individual State Laws in State where the vehicle is being Retailed, as well as State Laws for a State(s) where the vehicle will be Operated or Registered, to make sure there are no other additional requirements to make the vehicle eligible for operation on public streets or roads.

ACG T SPORT NEV meets the minimum requirements for LSV as specified in FMVSS #500 for low-speed vehicles, as of date of manufacture as shown on the vehicle's *"Certification Label*".

ACG is not liable for any additional requirements or modifications that your individual State may require.

ACG is not liable of errors in this manual or for incidental or consequential damages that result from the use of the material in this manual. The information contained in this document including the warranty information contained in separate "*Limited Warranty*" document is subject to change without notice.

ACG reserves the right to make design and equipment changes to vehicles without obligation to make these changes on units sold prior to the changes being made.

Throughout this manual, the words "LSV" or "NEV" and "vehicle" are used interchangeably.

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Cautions, Warnings, and Notes:

Throughout this "*Owner's Manual*" you will find the words "**WARNING!**" and "**CAUTION!**" These serve as reminders that attention is required.

"**WARNING!**" indicates an immediate hazard, which could result in an accident causing bodily injury.

"**CAUTION!**" identifies something that could result in damage to your vehicle.

You will also find information preceded by the word "**NOTE**" Notes are for your information and to make procedures more easily understood.

General Specifications

Description	Part Number	ACG Specification
Brake Fluid		DOT 4
Gear Box Lubricant		SAE 75W-90

CAUTION!
Make sure that the correct brake and gearbox fluid is used. Using a non-approved fluid may damage internal components.

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Description

This section is divided into ten areas, as follows:
- Specifications
- Description
- Inspection
- Check and Fill to Specification
- Loose Shipped Items
- Check Operation
- Road Test
- Appearance Operations
- Vehicle Lift Points
- Pre-Delivery Service Record

These ten areas:
- follow the sequence of the Pre-Delivery Service Record checklist used during the pre-delivery inspection. (PDI)
- are broken down (each area) into individual procedures which also follow the sequence of the Pre-Delivery Service Record checklist.
- contain procedures identified by a letter prefix.

Procedures:
- under the Inspection heading have an "A" prefix.
- under the Check and Fill to Specification heading have a "B" prefix.

Example:
If you are under the Check and Fill to Specification heading on the Pre-Delivery Service Record checklist and need to check tire pressures, you refer to B1 Tire Pressure in this section. You are provided information on where to locate the correct inflation pressures for the vehicle being serviced.

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Inspection

A2 Battery State of Charge

NOTE:

Be sure to fully charge batteries prior to using the vehicle for the first time.

Maintenance-Free Type Batteries

- On maintenance-free type batteries, recharge if the indicator displays less than **48 Volts**.
- If the **RED** Low Power light will illuminate the batteries have discharged to less than 25% of rated capacity, charge for at least 8 hours.

Flooded Type Batteries

- Check for proper fluid levels in all batteries.
- On flooded type batteries, recharge if the indicator displays less than **48 Volts**.
- If the **RED** Low Power light will illuminate the batteries have discharged to less than 25% of rated capacity, charge for at least 8 hours.

Charging Rate

NOTE:

If excessive gassing occurs during the charge, discontinue charging as the batteries have reached the serviceable charge.

If the batteries will not accept at least 5 amps after 20 minutes of charging, replace the batteries.

Charging Method

Refer to the "*Charging Procedure Manual*".

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A3 Battery Cables for Tightness and Proper Assembly

Check battery cables and connections for:

- tightness.
- proper assembly.
- properly routing and securing.

Repair as required.

A4 Brake Lines for Leaks, Damage and Routing

Check the brake lines and hoses for visual leaks, damage, kinks or interference with adjacent moving or frictional components.

A5 Steering Rack, Steering Linkage and Suspension for Damaged or Loose Fasteners and Missing Parts

1. Raise and support the vehicle.
2. Check jamb nuts on tie rod/tie rod end for proper torque specification.
3. Check steering rack bolts for proper torque specification. Check for cracked or missing washers.
4. Check steering linkage for tightness and proper installation of cotter pins.
5. Turn the steering wheel fully left and right and check for interference between steering linkage and adjacent components.
6. Inspect front and rear suspension for proper assembly and correctly installed components.
7. Inspect all suspension cotter pins for proper installation and make sure all lock tabs are bent for nut and bolt retention (if equipped).

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Check and Filling

B1 Tire Pressure

NOTE:

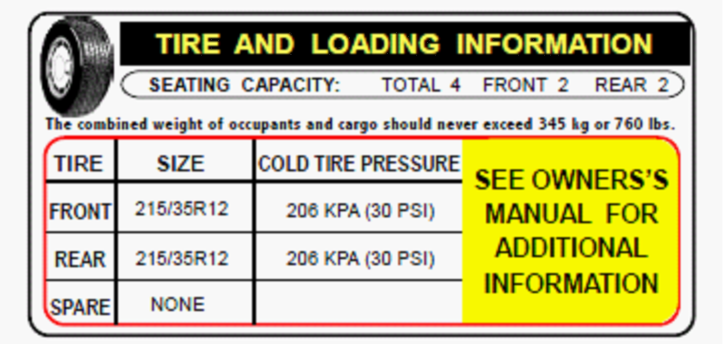
The tire inflation pressure information on the tire sidewall may not be the recommended tire operating pressure.
Always refer to the "*Tire Information Label*" on the vehicle for proper Tire Inflation Pressures.

1. Check the tires for proper inflation pressure.

2. Tire air pressure specifications are located on the "*Tire Information Label*" which is located on the vehicle is under Certification Label under driver seat.

NOTE:

The vehicle's tire information can be found on the *"Tire Information Label"*
(*Reproduced below*)



TIRE AND LOADING INFORMATION

SEATING CAPACITY: TOTAL 4 FRONT 2 REAR 2

The combined weight of occupants and cargo should never exceed 345 kg or 760 lbs.

TIRE	SIZE	COLD TIRE PRESSURE	
FRONT	215/35R12	206 KPA (30 PSI)	SEE OWNERS'S MANUAL FOR ADDITIONAL INFORMATION
REAR	215/35R12	206 KPA (30 PSI)	
SPARE	NONE		

The label location on the vehicle is under Certification Label under driver seat

Refer to the "*Owner's Manual*" for additional Information about Tires.

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B3 Brake Master Cylinder

If the brake fluid reservoir is excessively low, inspect the brake system for leakage.
To check brake fluid level, carefully clean and remove the reservoir cap.
1. The brake fluid maximum level should be at about one inch (25 millimeters) below the reservoir top.
2. If the brake fluid level is low, fill to maximum level.
3. Add only a DOT 4 brake fluid, such as **ACG High Performance DOT 4 Brake Fluid**
4. Replace the reservoir cap after filling.
5. Check jam nut on master cylinder push rod for tightness.

Loose Shipped Items Installation

D4 Loose Options

- ☐
- ☐ Vehicle Cover
- ☐
- ☐
- ☐

Label(s) Installation

E1 "Monroney" Label

☐ Inside of Windshield facing to Outside of the Vehicle

E2 "EP" Label

☐ Inside of Windshield facing to Outside of the Vehicle

E3 "FE" Label

☐ Inside of Windshield facing to Outside of the Vehicle

E4 "Dealer Installed Options" Label (if any)

☐ Inside of Windshield facing to Outside of the Vehicle

E5 "NEV Disclosure" Label

☐ Inside of Windshield facing to Outside of the Vehicle

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Check Operation

F1 Seat Belts

1. Check that each seat belt is properly installed.
2. If the seat belt attachment is hidden or covered, pull on the seat belt to eliminate slack in the belt and to determine that it is properly anchored to the vehicle.
3. Check the seat belt buckle and clasp for proper retention, release, and length adjustment.

F2 Lights

NOTE:

It is important to inspect for proper operation of lamps and instrument cluster gauge indicators, because it is evident to the new owner if there is a concern. Check the following lamps and indicators for proper operation of switches and brightness:

- Headlamps
- Tail lamps,
- Brake Lamps
- Turn Signals
- Hazard Warning Flashers
- Side Reflex Reflectors
- Instrument Cluster Gauge Indicators

NOTE:

Refer to the "*Owner's Manual"* for more information on the indicators to check during pre-delivery.

F3 Instruments for Proper Operation

Verify that the instrument cluster gauge operates properly prior the road test.

F4 Parking Brake

Check the operation of the parking brake.

F5 Horn

Check to be sure the horn sounds at all contact positions.

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F8 Back-up Alarm

Check the operation of the back-up alarm when the vehicle is in reverse. Turn the drive mode selector switch to the R (Reverse) position.
The back-up alarm should sound when the vehicle is in reverse.

F17 Radio/Clock Operation (if equipped)

Verify proper operation per the manufacture's instructions.

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Road Test

WARNING!
PREVENT POSSIBLE PERSONAL INJURY, DO NOT DRIVE THE VEHICLE WITHOUT PROPERLY SECURING SEAT BELTS FOR THE DRIVER AND PASSENGER.

H1 Check Driveability during Road Test

If a driveability condition exists, perform appropriate adjustments according to specifications shown on the vehicle control information decal or perform warranty service.

During start-up, acceleration, cruise and deceleration, check for unsatisfactory performance, such as:

- sluggish, poor acceleration
- surges or lopes
- smoking
- does not accelerate properly (engaging delays or jerks)
- squeaks, rattles and vibrations
- flat spots on tires
- any other unsatisfactory conditions

If a driveability condition exists, check the system. Perform the necessary diagnostic procedures as described in the Electrical Section of "*Service Manual*".

H2 Accelerator Operation and Return

Check for smooth operation and full return of the accelerator pedal during road test.
The accelerator pedal must operate smoothly, without binding or sticking, and return completely.

H3 Check for Squeaks, Rattles, Vibrations and Noise

Throughout the road test and especially on rough roads, listen for squeaks or rattles.
Listen for anything loose and for objectionable noise or vibration.

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H5 Brakes (Including Parking Brake)

NOTE:

Avoid sudden, hard stops; make slow, gradual stops.
1. Apply the brake pedal and check for good pedal height before road testing.
2. Check and correct the following conditions as necessary:
 steering pull while braking
 brake roughness (steering oscillation, seat vibration, or pedal pulsation that occurs during brake application).
 excessive brake pedal effort
 spongy pedal feel
3. Check the operation of the parking brake.

H6 Steering Control and Check

1. Check steering for:
 harshness.
 noise.
 wander.
 free play.

2. Check steering wheel return for:
 stiffness in either direction.
 inconsistency in either direction.

H7 Instruments for Proper Operation

Verify that the instrument cluster gauge operates properly during the road test.

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Appearance Operations

AP1 Wash Vehicle and Perform Detailed Cleanup of Interior and Exterior

1. Wash the vehicle completely using warm water. Wipe the vehicle dry.
2. Remove glass markings, tape and stickers.
3. Use Multi-Purpose Cleaner Concentrate or equivalent meeting ACG specification (diluted to proper concentration) on exteriors, floor, seats and tires.
4. Wipe the steering wheel. Make sure no grease or smudges have been left on any controls.
5. Check closely for any excess adhesive not removed by washing.

AP3 Remove Protective Covers (Body and Seats)

NOTE:

It is recommended that interior and exterior covers are left on until all service work is completed.

1. Remove the plastic covers from the upholstery.
2. Make sure that there are no stains or dirt on the upholstery.
3. Check that any debris is removed from underneath the floor mats.

AP4 Check Overall Appearance (Exterior, Interior)

1. Examine the fit of exterior body panels and interior trim panels.
2. Check the condition, fit and alignment of bumpers and trim moldings.
3. Remove any protective film covering the instrument cluster gauge.

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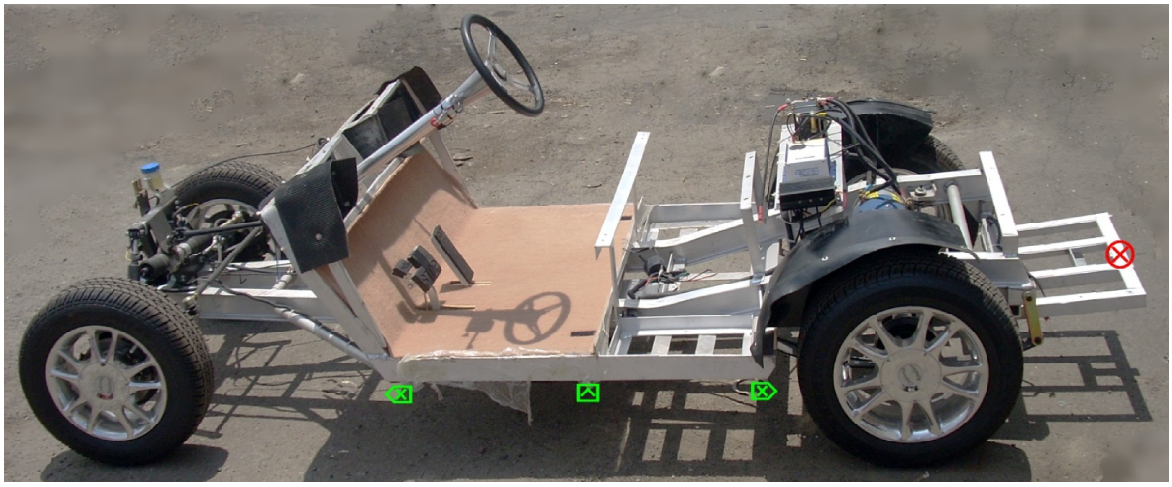
Vehicle Lift Points
Lifting Instructions

CAUTION!
Do not allow the hoist adapters to contact the Rear Axles, steering linkage or suspension arms. Damage to suspension and/or steering linkage components may occur if care is not used when positioning the hoist adapters of two-post hoists prior to lifting the vehicle.

CAUTION!
Damage to suspension or steering linkage components may occur when positioning hoist adapters. Front adapter pads should be positioned carefully to ensure maximum contact under the frame.

For additional information, refer to Lifting in the "*Owner's Manual"* for more information.



Jacking Points

You need to observe the following precautions:
Park the vehicle on a firm level surface; avoiding icy or slippery areas.
Set the parking brake and block both the front and rear of the tire diagonally opposite the jacking position. For example, if the right front tire is being changed, block the left rear wheel.
Use a small floor style jack or low profile scissors jack only.
Jack the vehicle only from the side of the vehicle, on the main frame rail, at the points indicated by **X** where the tub or floor panel support and the main frame rail are welded (See picture above).

Do not use the rear Trailer Hitch Adapter indicated by **X** as lifting point !
However it can be used as Tie-Down point during transport see "*Owner's Manual*" - page 50 for details.

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